Project Schedule for the Response to the Sulfolane Plume at Flint Hills North Pole Refinery February 1, 2011

| Task | Target Completion Date | Status | Schedule (2011) | | | | | | | | | | | |
|--|---------------------------|----------------------|-----------------|-----|-----|-----|----------|-----|-----|-----|-----|-----|-----|-----|
| | | | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | ОСТ | NOV | DEC |
| Site Investigation Activities: | | | | | | | | | | | | | | |
| 1 Draft Site Characterization Report | Jul-10 | Completed <link/> | | | | | | | | | | | | |
| 2 DEC and Technical Project Team (TPT) review and revision of work plans | Aug-10 | Completed <link/> | | | | | | | | | | | | |
| 3 Identification of contaminant sources | Aug-10 | Completed | | | | | | | | | | | | |
| 4 Source control for known sources | | Completed | | | | | | | | | | | | |
| 5 Inspections to identify new contaminant sources | | Ongoing | | | | | | | | | | | | |
| 6 Horizontal extent of contamination-top of aquifer | Nov-10 | Completed | | | | | | | | | | | | |
| 7 Vertical extent of contamination | Feb-11 | ???? | | | | | | | | | | | | |
| 8 Drinking well search and sampling | Jan-11 | Completed ??? | | | | | | | | | | | | |
| 9 Garden Study | Sep-10 | Completed | | | | | | | | | | | | |
| 10 Garden Study Report and Health Consult | Jan-11 | Completed ?? <link/> | | | | | | | | | | | | |
| 11 Fate and Transport modeling | Draft - April 2011 | Ongoing | | | , | , | l | | | | | | | |
| 12 TPT review and revision of modeling | May-11 | Ongoing | | | | | | | | | | | | |
| 13 Draft Site Characterization Report | May-11 | Ongoing | | | , | | | | | | | | | |
| 14 DEC and TPT review & revision of the draft report | Jun-11 | Ongoing | | | | | | | • | | | | | |
| 15 TPT Meetings | Monthly meetings | Ongoing | | | | | <u> </u> | | | | | | | |
| | thru Dec 2011 | | | | | | : | | | | | | | |
| On-Refinery Cleanup Plan: | | | | | | | | | | | | | | |
| 1 Draft Interim Remedial Action Plan | Jul-10 | Completed | | | | | | | | | | | | |
| 2 DEC and TPT review and revision of draft plan | Aug-10 | Completed | | | | | | | | | | | | |
| 3 Coalescer installation to improve oil recovery | Feb-10 | Completed | | | | | | | | | | | | |
| 4 Piping and well upgrades | Mar-11 | Ongoing | | | | | | | | | | | | |
| 5 New recovery well installation | Mar-11 | Ongoing | | | | | | | | | | | | |
| 6 Carbon filtration installation | Mar-11 | Ongoing | | | | | | | | | | | | |
| City of North Pole Water Supply: | | | | | | | | | | | | | | |
| 1 New Wells installed | Sep-10 | Completed | | | | | | | | | | | | |
| 2 Piping installed | Sep-10 | Completed | | | | | | | | | | | | |
| 3 System online | Jan-11 | Completed??? | | | | | | | | | | | | |
| Permanent Water Supply Options for Impacted Priva | te Wells: | | | | | | | | | | | | | |
| 1 Connection to City water for 29 wells in city limits | Aug-10 | Completed | | | | | | | | | | | | |
| 2 Development of in-home treatment system | Feb-11 | ????? | | | | | | | | | | | | |
| technology | | | | | | | | | | | | | | |
| a. Lab testing | Dec-10 | Completed | | | | | | | | | | | | |
| b. Pilot-scale testing | Jan-10 | Completed | | | | | | | | | | | | |
| c. Technology verification by DEC and 3 rd party | Feb-11 | ???? | | | | | | | | | | | | |

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| d. Available for installation (if verified) | Feb-11 | ???? | | | | | | | |
| 3 Evaluation of a public water system | | | | | | | | | |
| a. Feasibility study with 35% preliminary design | June 2010. | Completed & determined unfeasible at this time. | | | | | | | |
| Feasibility Study for Plume Cleanup | | | | | | | | | |
| Evaluation of alternatives for treating sulfolane in the aquifer outside the source areas on the refinery. | Jun-11 | Ongoing | | | | | | | |
| | | | | | | | | | |
| Record of Decision | | | | | | | | | |
| 1 Draft Final Cleanup Plan | | Jun-11 | | | | | | | |
| 2 TPT and DEC review and revision of the cleanup | | Jul-11 | | | | | | | |
| plan | | | | | | | | | |
| 3 Implementation of final cleanup plan | | Aug-11 | | | | | | | |